## Figure 1A

No.	Kinase-Subclass	Family	Sub	Protein	αD sequence
1	Serine/Threonine	RAF.		c-Raf	TQWCEGSSLYKHLHVQETK F
2	Serine/Threonine	RAF .		Araf	TQWCEGSSLYHHLHVADTR F
3	Serine/Threonine	RAF		Braf	TOWCEGSSLYHHLHIETKF
4	Serine/Threonine	CAPK		cAPKa	MEYVPGGEMFSHLRRIGRF
4	Serine/Threonine	CAPK		cAPKb	MEYVPGGEMFSHLRRIGRF
5	Serine/Threonine	CAPK		cAPKg	MEYVPGGEMFSRLQRVGRF
6	Serine/Threonine	PKC		PKCa	MEYVNGGDLMYHIQQVGK F
7	Serine/Threonine	PKC		PKCb	MEYVNGGDLMYHIQQVGR F
8	Serine/Threonine	PKC		PKCg	MEYVTGGDLMYHIQQLGKF
9	Serine/Threonine	PKC		PKCd	MEFLNGGDLMFHIQDKGRF
10	Serine/Threonine	PKC		PKCe	MEYVNGGDLMFQIQRSRKF
11	Serine/Threonine	PKC		PKCet	MEFVNGGDLMFHIQKSRRF
12	Serine/Threonine	PKC		PKCth	MEYLNGGDLMYHIQSCHKE

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## Figure 1B

13	Serine/Threonine	Akt/PKB	Akt1/Raca	MEYANGGELFFHLSRERVF
13	Serine/Threonine	Akt/PKB	Akt2/Racb	MEYANGGELFFHLSRERVF 
14	Serine/Threonine	GSK3	GSK3a	LEYVPETVYRVARHFTKAK LII
15	Serine/Threonine	GSK3	GSK3b	LDYVPETVYRVARHYSRAK QTL
16	Serine/Threonine	CK II	CK IIa	FEHVNNTDFKQLYQTL
17	Serine/Threonine	CK II	CK IIa'	FEYINNTDFKQLYQIL
18	Serine/Threonine	bARK1,2	bARK1	LDLMNGGDLHYHLSQHGV F
18	Serine/Threonine	bARK1,2	bARK2	LDLMNGGDLHYHLSQHGV F
19	Serine/Threonine	GRK1	GRK1	MTIMNGGDIRYHIYNVDED NPGF
20	Serine/Threonine	GRK4	GRK4	LTIMNGGDLKFHIYNLGNPG F
21	Serine/Threonine	GRK5	GRK5	LTIMNGGDLKFHIYNMGNP GF
22	Serine/Threonine	GRK6	GRK6	LTLMNGGDLKFHIYHMGQA GF

# Figure 1C

23	Serine/Threonine	CaMK		CaMK I	MQLVSGGELFDRIVEKGGY
24	Serine/Threonine	CaMK		CaMK IIa	FDLVTGGELFEDIVAREYY
				·	
24	Serine/Threonine	· CaMK		CaMK IIb	FDLVTGGELFEDIVAREYY
24	Serine/Threonine	CaMK		CaMK IIg	FDLVTGGELFEDIVAREYY
24	Serine/Threonine	CaMK		CaMK IId	FDLVTGGELFEDIVAREYY
25	Serine/Threonine	POLO		Plk	LELCRRSLLELHKRRKAL
25	Serine/Infeoratie	POLO		PIK	LELCRRSLLELHARRAL
26	Serine/Threonine	POLO		Plx1	LELCRRRSLLELHKRRKAV
27	Serine/Threonine	POLO		polo	LELCKKRSMMELHKRRKSI
			·		
28	Serine/Threonine	POLO	1.	SNK	LEYCSRRSMAHILKARKVL
29	Serine/Threonine	POLO		CDC5	LEICPNGSLMELLKRRKVL
30	Serine/Threonine	POLO		Sak	LEMCHNGEMNRYLKNRVK PF
		Por		7.1	L DI CODICCI ALTRICA DI CON
31	Serine/Threonine	POLO		Prk	LELCSRKSLAHIWKARHTL
			<u> </u>	<u> </u>	

# Figure 1D

31	Serine/Threonine	POLO		Fnk	LELCSRKSLAHIWKARHTL
	·				
32	Serine/Threonine	POLO	, <del>-</del>	Plo1	LELCEHKSLMELLRKRKQL
	es.				
33	Serine/Threonine	MARK/p		MARK1	MEYASGGEVFDYLVAHGR M
33	Serine/Threonine	MARK/p 78		MARK2	MEYASGGEVFDYLVAHGR M
34	Serine/Threonine	MARK/p 78		P78	MEYASGGKVFDYLVAHGR M
35	Serine/Threonine	CDK		CDK2	FEFLHQDLKKFMDASALTGI
26		CDV		CDV.4	PELITY DOD'T PATAL DIV A PRINC
36	Serine/Threonine	CDK		CDK4	FEHVDQDLRTYLDKAPPPG L
37	Serine/Threonine	CDK		CDK6	FEHVDQDLTTYLDKVPEPG
37	Serine/Threomne	CDK		CDRO	V
38	Tyrosine	SRC		c-Src	TEYMSKGSLLDFLKGETGK
],	·	J. C.			YL
39	Tyrosine	SRC	0	c-Yes	TEFMSKGSLLDFLKEGDGK
					YL
40	Tyrosine	SRC		Fyn	TEYMNKGSLLDFLKDGEGR
					AL
41	Tyrosine	SRC		c-Fgr	TEFMCHGSLLDFLKNPEGQ
					DL
	<u> </u>			<u> </u>	<u> </u>

# Figure 1E

42	Tyrosine	LYN/HC K		Lyn	TEYMAKGSLLDFLKSDEGG KV
43	Tyrosine	LYN/HC K		Hck	TEFMAKGSLLDFLKSDEGS KQ
44	Tyrosine	LCK		Lck	TEYMENGSLVDFLKTPSGIK L
45	Tyrosine	CSK		Csk	TEYMAKGSLVDYLRSRGRS VL
46	Tyrosine	CSK		Matk	MEHVSKGNLVNFLRTRGRA LV
47	Tyrosine	FAK	· ·	Fak	MELCTLGELRSFLQVRKYSL
48	Tyrosine	ABL		c-Abl	TEFMTYGNLLDYLRECNRQ EV
49	Tyrosine	ENDOTH ELIAL	Tie/Tek	Tie	IEYAPYGNLLDFLRKSRVLE TDPAFAREHGTASTL
50	Tyrosine	ENDOTH ELIAL	Tie/Tek	Tek	IEYAPHGNLLDFLRKSRVLE TDPAFAIANSTASTL
51	Tyrosine	ENDOTH ELIAL	FGFR	Flg	VEYASKGNLREYLQARRPP GLEYCYNPSHNPEEQL
52	Tyrosine	ENDOTH ELIAL	FGFR	Bek	VEYASKGNLREYLRARRPP GMEYSYDINRVPEEQM
53	Tyrosine	ENDOTH	FGFR	FGFR-3	VEYAAKGNLREFLRARRPP GLDYSFDTCKPPEEQL

# Figure 1F

54	Tyrosine	ENDOTH	FGFR	FGFR-4	VECAAKGNLREFLRARRPP GPDLSPDGPRSSEGPL
55	Tyrosine	ENDOTH ELIAL	PDGFR	PDGFR-a	TEYCFYGDLVNYLHKNRDS FLSHHPEKPKKELDIFGLNP A
56	Tyrosine	ENDOTH ELIAL	PDGFR	PDGFR-b	TEYCRYGDLVDYLHRNKHT FLQHHSDKRRPPSAELYSNA L
57	Tyrosine	ENDOTH ELIAL	Flt/Flk	Flt1	VEYCKYGNLSNYLKSKRDL FFLNKDAALHMEPKKEKME PG
58	Tyrosine	ENDOTH ELIAL	Flt/Flk	Flt4	VEFCKYGNLSNFLRAKRDA FSPCAEKSPEQRGRFRAMV EL
59	Tyrosine	ENDOTH ELIAL	Flt/Flk	Flk1	VEFSKFGNLSTYLRGKRNEF VPYKSKGARFRQGKDYVGE L
60	Tyrosine	HGFR		c-Met	LPYMKHGDLRNFIRNETHN P
61	Tyrosine	HGFR		c-Sea	LPYMRHGDLRHFIRAQERSP
62	Tyrosine	HGFR		Ron	LPYMCHGDLLQFIRSPQRNP
63	Tyrosine	EGFR	<u>-</u>	EGFR	TQLMPFGCLLDYVREHKDN I
64	Tyrosine	EGFR		ErbB2	TQLMPYGCLLDHVRENRGR L
65	Tyrosine	EGFR		ErbB3	TQYLPLGSLLDHVRQHRGA L

# Figure 1G

66	Tyrosine	EGFR		ErbB4	TQLMPHGCLLEYVHEHKDN
					I
		.   .			
67	Tyrosine	RET		Ret	VEYAKYGSLRGFLRESRKV
	1		-		GPGYLGSGGSRNSSSLDHPD
					ERAL
68	Tyrosine	· TRK-		Trk -	FEYMRHGDLNRFLRSHGPD
		NGFR		NGFR	AKLLAGGEDVAPGPL
1					
69	Tyrosine	TRK-		TrkB	FEYMKHGDLNKFLRAHGPD
ا	-,	NGFR	-		AVLMAEGNPPTEL
				٠.	
70	Tyrosine	TRK-		TrkC	FEYMKHGDLNKFLRAHGPD
"	1,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	NGFR			AMILVDGQPRQAKGEL
71	Tyrosine	SYK/ZA		Syk	MEMAELGPLNKYLQQNRH
'		P70			V
72	Tyrosine	SYK/ZA		Zap70	MEMAGGGPLHKFLVGKRE
-		P70	•		EI
1		·			·
73	Tyrosine	TYK/JA		Jak1	MEFLPSGSLKEYLPKNKNKI
1		K ·			·
				· ·	
74	Tyrosine	TYK/JA		Jak2	MEYLPYGSLRDYLQKHKER
		K			I
75	Tyrosine	TYK/JA		Jak3	MEYLPSGCLRDFLQRHRAR
		K		·	L
					·
76	Tyrosine	TYK/JA		Tyk2	MEYVPLGSLRDYLPRHSI
		K			
	<b>.</b>				
77	Serine/Threonine	IAK		Iak1	LEYAPLGTVYRELQKLSKF
1					<u> </u>

## Figure 1H

78	Serine/Threonine	CHK		Chk1	LEYCSGGELFDRIEPDIGM
79	Serine/Threonine	IKK		IKK-1	MEYCSGGDLRKLLNKPENC CGL
80	Serine/Threonine	IKK		IKK-2	MEYCQGGDLRKYLNQFEN CCGL
81	Serine/Threonine	DAPK		DAPK	LELVAGGELFDFLAEKESL
82	Tyrosine	IRK		IRK	MELMAHGDLKSYLRSLRPE AENNPGRPPPTL
83	Serine/Threonine	Activin/T GFbR	TGFbR	TGFbRII	TAFHAKGNLQEYLTRHVI
84	Serine/Threonine	Activin/T GFbR	ACTR	ACTRIIA	TAFHEKGSLSDFLKANVV
85	Serine/Threonine	Activin/T GFbR	ACTR	ACTRIIB	TAFHDKGSLTDYLKGNII
86	Serine/Threonine	Activin/T GFbR	ALK	ALK1	THYHEHGSLYDFLQRQTL
87	Serine/Threonine	Activin/T GFbR	ALK	ALK2	THYHEMGSLYDYLQLTTL
88	Serine/Threonine	Activin/T GFbR	ALK	ALK3	TDYHENGSLYDFLKCATL
89	Serine/Threonine	Activin/T GFbR	ALK	ALK4	SDYHEHGSLFDYLNRYTV

# Figure 1I

89	Serine/Threonine	Activin/T GFbR	ALK	ALK5	SDYHEHGSLFDYLNRYTV
90	Serine/Threonine	Activin/T GFbR	ALK	ALK6	TDYHENGSLYDYLKSTTL
91	Tyrosine	DDR		DDR1	TDYMENGDLNQFLSAHQL
92	Tyrosine	DDR		DDR2	TEYMENGDLNQFLSRHEP
93	Serine/Threonine	ILK		ILK	THWMPYGSLYNVLHEGTNF
94	Tyrosine	MAPK		JNK	MELMDANLCQVIQMEL

Protein Kinase

#### Figure 2A

```
TQWCEGSSLYKHLHIETKF
c-Raf
         SNFSDATTIFH
Y * MWR
                                       VDSRW
                                   Ι
Araf
                                   M
                                       M *
Braf
                                   ν
                                       L
         MEYVPGGEMFSHLRRIGRF
cAPKa
         IQFLNAADLMFRIQHVRKW
cAPKb
                          I W Y Q M S Q E H V Y
V Y W K V K D L K I
         LDWAT
cAPKg
         VN
                I S
                                     NKKAL
TSS M
                             1
                              TN
               M Q
                            L
V
                G
                                       N C
                                       E M
                                       T D
                                         R
                                         T
*
         M E Y V N G G D L M F H I Q Q V G K F I D F L T A A E I I Y Q L N D L R R W L * W I Q * M L W N M R K H Y
PKCa
PKCb
         L * W I Q
V M S
PKCg
                           v v
                                       KSK
PKCd
                                       SCA
PKCe
                                       NΙ
PKCet
                                       EM
PKCth
                                       TR
*T
Akt1/Raca MEYANGGELFFHLSRERVF
         I Q F V Q A A D I WW
L D W I * M Y Y
                                   ITHDKIW
Akt2/Racb
                                       ·K *
                                              LY
                                   M
DmRAC
                                   V
                                             M
                           V
         V N
                L
                M
                G
         LEYVPETVYRVARHYTKAKQII
IDFI DSIHKIIKQFSRTNLTL
GSK3a
GSK3b
                                     NWA
                                              LRNRM
         M * W L
                         LF
                               L V
Sgg/zw3
                                         N
                                              SQILV
                        MW
                               M L
ASK-a
                M
                                          Q
                                              I
                                                  M M
                                 M
ASK-g
                                 G
                                              M
                                                  V
                                                    V
                                                    S
K
                                              V
                                              G
         FEHVNNTDFKQLYQTL
WDYIQQSEWRNIFNII
CK IIa
СК Па'
                                        S M
                                 MW
            *
              FL
                                       M V
V
              WM
                                        L
```

-

#### Figure 2B

T

D

```
LDLMNGGDLHYHLSQHGVFNPGF
MTIIQAAEIRF IYNVDEDGFAW
bARK1
        MTIIQAAEIRF
bARK2
                       * M K W
                                MTHLENPQW
GRK1
        IEML
                                 V F MAQAAY
W I * I W
L Y
        v s v v
GRK4
GRK5
GRK6
                                          M E
                                           DG
CaMKI MQLVSGGELFDRIVEKGGY
CaMKIIa FDIITAADIWEDLIAREYF
                       * MY * KMLD
V EVMG
                                         D'FW
CaMK IIb WNML
                                         A W
        YEVM
CaMK IIg
CaMK IId
         I
         L
         V
         LELCRRRSLLELHKRRKALF
                                         HSVW
VVIY
         IDISKKGEMMAILRA
Plx1
                 SNKDINRYW
PHATVAHMI
            Y
Polo
                                     K
                                         RKP
            M
SNK
                                         ITM
CDC5
             y
                 ΗQ
                           IDVM
                                     Q
                           VKFV
QGWF
G*Y
                 E
             F
                                         LQ
Sak
                                         ΜŤ
Prk
                 ₽
*
                                           Ι
Fnk
                                           L
Plo1
                                           M
                                           R
                                           N
                                           G
         MEYASGGEVFDYLVAHGRM
P78
         LDFGTAAKIWEFIIG
I*W DLY*WML
                                         AKI
MARK1
MARK2
                       R M
                                 V M
Par1
         F E F L H Q D L K K F M D A V A L T G I W D H V D N E I R T Y L E K S P P P A L
CDK2
CDK4
                     * MTRWI * RAGES
VSS V GI I
         Y * W I E
CDK6
                                               M
             Y M *
                                     L
                                         M
                                         V
                                     M
```

#### Figure 2C

```
TEFMSKGSLLDFLKGETGKYL
c-Src
         MDYVNHANIVNYIREGSRRAV
c-Yes
          S * H I C N
I W L A R
L E Q
V T
                                           DPDKQDQ
                           TMIEWM
Fyn
                                           NDEAGKI
                           QVMQ
c-Fgr
                                           S R G
T K A
Q A *
A *
                                                     S V M
Lyn
                                                     ILN
Hck
                                                     A_{I}F
                   Q
Lck
                                                     ΝW
Csk
                                                     T E
L R
                   G
Matk
                                                     M I
                                                     V M
                                                        G
          MELCTLGELRSFLQVRKYSL
Fak
          IDISSIADIKTWINIKRFTI
L*M M*M YM L W M
          TEFMTYGNLLDYLRECNRQEV
c-Abl
          SDWISFAQIIEFIKDSQKNDI
               ΥL
                      W
                             MM * WM
                                                          L
                              V V
                                                          M
          I E Y A P Y G N L L D F L R K S R V L E T D P A F A R E H G T T D F C R H A D I V N Y I H R N K H T F L Q H H S D I A N S P V * W S F F Q M S T W M K S K D S D F S N K P E K R R P E
Tie
Tek
PDGFR-b
                                                   NAWSLCRDKAPKKR
IEYVPYGERSLEMS
LI*IEQ WGGDQQD
MM MNF Y*LKDFK
                  TKW
                           ÈVIE
                                       V
                                            A T
PDGFR-a
          L
                               MQ
TS
                                            G Q
T R
                  G W
          M
Flt1
                    Y
          S
Flt4
                                                                        LKDFK
MI*T*
Flk1
                                                          WTW
YIS
                                                   EV
                                                                    T
                                                   Q D
* G
                                                                        V M
T V
                                                                               R
                                                                                I
                                                            M
                                                                           Ġ
                                                                               LVNWY
                                                             V
```

STLYSNAL Tie AEFGLEPA Tek DIEKMVEG PDGFR-b KKRAVGDI PDGFR-a RFDFTQGM GSIWID\*V Flt1 Flt4 TDMR Ι Flk1 ELV L MW M VY Α R K w \* Y

#### Figure 2D

```
V E Y A S K G N L R E Y L Q A R R P P G L E Y C I D C G A R A Q I K D F I R G K K AMD L S
                                                                          YNP
FDI
                                                                                  SHNP
Flg
                                                                                  NRVS
Bek
                                                                           P Q
W E
                                                                P *
          . L 🔻
                                      * WMN
                                                                     FT
                                                                                T
                                                                                   C
                                                                                     ΚP
                F
                      T
                                M
FGFR-3
                                                                                G P
L T
                                                                     W
                                                                                        S
                                           V K
                W
                      G
FGFR-4
           M
                                                                                        Q
I
L
                                                                      1
                                                                                M Q
                                                                     M
                                                                                 V
                                                                                 Š
                                                                                        M
T
Flg
           E Q L
           G P M
Bek
FGFR-3
           DNI
FGFR-4
           LPYMKHGDLRNFIRNETHNP
c-Met
                           A E I L H W L K A Q E R S

* M K Q Y M S P Q K Q

V I V Q D S T

M T N D

V G * N
            I
                 FIR
c-Sea
                W L C
V S
           M
Ron
            TQLMPFGCLLDYVREHKDNI
EGFR
                         YASIIEHIHQNRGRL
L TMM*FLKDQ EAM
H VV WM N AOV
            SNYL
ErbB2
                 II
                                                         EAM
ErbB3
                                                         A Q V
* K
                 M V
                                                 N
ErbB4
                         H
                                 V V
                                        WM
                 V
                         W
                 F
                         I
                                                           G
                 W
                         M
           V E Y A K Y G S L R G F L R E S R K V G P G Y L G S G G S R N I D F G R F A T I K A W I K D T K R I A A F I A T A A T K Q
Ret
           L * W
                         W
                                         Y M
                                                           L
                                                                      WM
                                 M
                                                           M
           M
           S S L D H P D E R A L
T T I E E D K G I
Ret
                 M *
                                      M
                 ý
                                       ν
```

#### Figure 2E

```
MEMAELGPLNKYLQQNRHVI
IDIGGGA IHRFIVGKKEEL
Syk
Zap70
         L
            DΙ
                  M Q
                       WMNNQ
                                DIM
         v
            A M
                   V
                         VIAR
                                 L
              V
                          L
                                 M
                          M
                                 D
Jak1
      MEFLPSGSLKEYLPKNKNKI
      I D Y I
Jak2
              YACIRDFIQRHRERL
              Ť
                 ΤM
                      * WMN
        * WM
                             Q S A
T Q
Jak3
                                   M
Tyk2
                                Q
              w
                                D
              L
                                G
              I
                                I
      LEYAPLGTVYRELQKLSKF
Iak1
      IDFG
              IASIFKDINRITRW
      M * W
                  L W
                       * M ·
              M
                  M
Chk1
      LEYCSGGELFDRIEPDIGM.
      IDFSTAADIWEKLD
                             ELAI
                 * M Y *
                        M *
                             * M
                   V
      MEYCSGGDLRKLLNKPENCCGL
IKK-1
      IDFSQAAEIKRYIQQFDQSSAI
IKK-2
        * W
            T
                       IM.
                           R W *
      L
                  M
                                      M
                       M V
                           NY
                       V
                       \mathbf{F}
                       W
DAPK
      LELVAGGELFDFLAEKESL
      IDIIGAADIWEWIGDRDTI
                 * M Y * Y M
      M * M L
         V M
IRK
      MELMAHGDLKSYLRSLRPEAENNPGRPPPTL
      IDIIG
               AEIRTFIKTIK
                                 DGDQQ
                                          A K
                                                  SI
        * M L
                 * M
                       WM
                             M
                                                   M
                                                   V
      TAFHAKGNLQEYLTRHVI
TGFbRII
      s \,\, g \, w
ACTRIIA
            ERASISDFIKANIV
                 QMT * WMS GQLL
TV VRK MM
         Y
            D
ACTRIIB
```

MM

G

#### Figure 2F

```
THYHEHGSLYDFLQRQTL
SDF DMATIFEYIKLTSV
EW *N MW*WMNCA I
* I V VRSY M
ALK1
ALK2
ALK3
ALK4
                                                           M
                                                   ΚN
ALK5
                          v
                                                   I S
ALK6
                                                   M F
                          Q
                                                   v w
                                                   T G
```

Trk-NGFR F E YMR H G D L N R F L R S H G P D A K L L A G G E D V A P TrkB WD F I K A E I Q K W I K A A E G V I M V E A N P P T E TrkC Y \* W L \* M YM T \* MM I I D Q E R Q A V V V G R V V L A D \* I S D QERQA D\*ISD M \* I LNG M G \* G K

Trk-NGFR P L L G E ·I TrkB TrkC AI M M V V D

T D YMENGDLNQFLSAHQL S E F I D Q A E I Q N W I T R E P \* WL \* \* M YM K N I DDR1 DDR2 D V V G \* M

THWMPYGSLYNVLHEGTNFVVS FI FATIFQII DASQWII YL W MW LM \* YLL ILK ΜV V M ΜM

## Figure 3A

Peptide <u>Aktl/Raca</u>	N-terminal														•										C	C-termi	inal
95 K014D001	Myristyl -	G	M	E	Y	A	N	G	G	E	L	F	F	H	L	S	R	E	R	٧	F					- NI	H2
ALK1																											
96 K048D101	Myristyl -	G	T	н	Y	H	E	H	G	S	L	Y	D	F	L	Q	R.	Q	T	L						- NI	H2
Braf								•																	٠		
97 K003D001	Acetyl -	K	K	K	K	K	K	G	G	S	S	L	Y	Н	H	L	H	I	I	E	T	K	F	7		- N	H2
98 K003D101	Myristyl -	G	T	Q	w	S	E	G	S	S	L	Y	H	H	L	H	I	I	E	T	K	F				- N	H2
c-Abl																											
99 K061D101 ·	Myristyl -	G	T	E	F	M	T	Y	G	N	L	L	D	Y	L	R	E	С	N	R	Q	E	, 1	V		- N	H2
c-Met												•															
100 K073D101	Myristyl -	G	L	P	Y	M	K	H	G	D	L	R	N	F	I	R	N	E	T	H	N	P	٠ -			- N	H2
c-Raf																											
101 K001D101	Myristyl -	G	T	Q	W	S	E	G	S	S	L.	Y	K	H	Ĺ	Н	V	Q	E	T	K	F	•			- N	H2
102 K001D001	Acetyl -	s	S	L	Y	K	H	L	H	V	Q	E!	T	K	F											- N	H2
c-Sea																											
103 K074D101	Myristyl -	G	L	P	Y	M	R	H	G	D	L	R	H	F	1	R	Α	Q	E	R	S	P	•	•		- N	H2
c-Src																											
104 K051D101	Myristyl -	G	T	E	Y	M	S	K	G	S	L	L	D	F	L	K	G	E	T	G	K	Y	[ ]	L ·		- N	H2
105 K051D001	Acetyl -	G	S	L	L	D!	L	K	G	E	T	G	K	F	L											- N	IH2
CDK2																											
106 K049D101	Myristyl -	, G	F	E	F	L	H	Q	D	L	K	K	F	M	D	Α	S	A	L	Ι		ìI			•	- N	IH2
107 K049D001	Acetyl -	D	!L	K	K	F	M	D	A	S	A	L	T	G	M	[										- N	īH2
CDK4			,																								
108 K050D001	Acetyl -	D	! L	R	T	Y	L	D	K	A	P	P	P	G	L											- N	TH2
109 K050D101	Myristyl -	G	F	E	H	V	D	Q	D	L	R	T.	Y	L	D	K	Α	P	P	F	• (	) L	ر			- N	īH2
CDK6																											
110 K089D101	Myristyl -	G	F	E	H	V	D	Q	D	L	T	T	Y	L	D	K	V	P	E	F	, (	<i>?</i> {	J			- N	1H2
Chk1																									·		
111 K088D102	Myristyl -	G	E	Y	S	S	G	G	E	L	F	D	R	I	E	P	D	Ι	G	ì	1					- N	IH2
112 K088D101	Myristyl -	G	E	Y	Α	S	G	G	E	L	F	D	R	I	E	P	D	I	G	i	1					- N	VH2
CK IIa															•												
113 K022D001	Acetyl -	K	K	K	K	K	G	G	N	N	T	D	F	K	Q	L	Y	Ç	<b>T</b>	·I							VH2
114 K022D101	Myristyl -	G	F	E	H	٧	N	N	T	D	F	K	Q	L	Y	ζ	T	L	,							- N	VH2

# Figure 3B

	<u>Csk</u>																										
115	K058D101	Myristyl -	G	T	E	Y	M	Α	K	G	S	L	V	D	Y	L	R	S	R	G	R	S	V	′ I	L	- NH2	
110	K058D001	Acetyl -	G	S	L	V	D!	L	R	S	R	G	R	S	V	L										- NH2	2
	<u>Fak</u>																•										
11′	7 K060D101	Myristyl -	G	M	E	L	S	T	L	G	E	L	R	S	F	L	Q	٧	R	K	Y	S	L			- NH2	2
	FGFR-3	•					•																		•		
113	8 K071D101	Myristyl -	G	G	N	L	R	E	F	L	R	Α	R	R	P	P	G	L	E							- NH2	2
119	9 K071D001	Acetyl -	G	N	L	R	E!	F	L	R	A	R	R	P	P	G	L	E	!		•					- NH2	2
12	0 K071D102	Myristyl -	G	V	E	Y	A	A	K	G	N	L	R	E	F	L	R	A	R	R	P	P	C	} ]	LE	- NH2	2
12	1 K071D901	Stearyl -	G	s	F	D	T	S	K	P	P	E	E	Q	L											- NH	2
	Flk1																										
12	2 K068D101	Myristyl -	G	V	E	F	S	K	F	G	N	L	S	N	F	L	R	A	K	R	N	I	, F	?	V P	- NH	2
12	3 K068D101	Myristyl -	G	Ġ	N	L	S	N	F	L	Ŕ	A	K	R	N	L	F	V	P						•	- NH	2
12	4 K068D001	Acetyl -	G	N	L	S	N	F	L	R	A	K	R	N	L	F	V	P								- NH	2
12	5 K068D901	Stearyl -	G	R	F	R	Q	G	K	D	Y	V	G	E	L											- NH	2
	GSK3b													٠											•		
12	6 K018D003	Acetyl -	K	K	K	K	K	K	G	G	G	V	Α	R	H	Y	S	R	A	K	. (	7	. I	١.	P	- NH	2
12	7 K018D002	Acetyl -	V	Α	R	H	Y	S	R	Α	K	Q	T	L	P											- NH	2
12	8 K018D101	Myristyl -	G	Ď	Y	V	P	E	T	V	Y	R	V	A	R	H	Y	S	R	. A	K	(	) ]	r	L .;	- NH	2
12	9 K018D001	Acetyl -	R	V	Α	R	H	Y	S	R	A	K	Q	T												- NH	2
	Hck									-															-		
13	0 K056D101	Myristyl -	G	T	E	F	M	A	K	G	S	L	L	D	F	L	K	S	D	E	C	3 S	F	ζ.	Q	- NH	2
	Iak1										-																
13	1 K087D101	Myristyl -	G	L	E	Y	Α	P	L	G	T	V	Y	R	E	L	Q	K	L	S	K	C F	7			- NH	2
	IKK-1														•		•										
13	2 K090D101	Myristyl -	. G	M	E	Y	S	S	G	G	D	L	R	K	L	L	N	K	P	E	· N	1 5	3 5	5	G L	- NH	2
	IKK-2																										
13	3 K091D101	Myristyl -	G	M	E	Y	S	Q	G	G	D	L	R	K	Y	L	N	Q	F	E	. 1	1 5	5 5	S	G L	- NH	2
	<u>ILK</u>		•						-			•															
13	4 K107D101	Myristyl -	G	T	Н	W	M	P	Y	G	S	L	Y	N	V	L	Н	E	G	T	. 1	1 E	7 1	V	V	- NH	
13	5 K107D901	Stearyl -	Ġ	Y	N	V	L	H	E	G	T	N	F	٧	V											- NH	2

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# Figure 3C

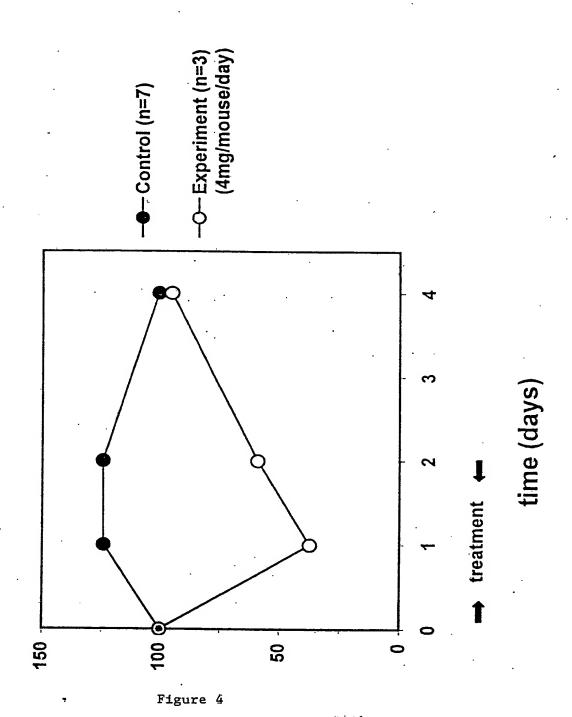
<u>IRK</u>																										
136 K094D101	Myristyl -	G	M	E	L	M	Α	H	G	D	L	K	·S	Y	L	R	S	L	R	P					- NH	2
137 K094D001	Acetyl -	Α	Q	N	N	P	G	R	P	P	P	T	L												- NH	2
138 K094D102	Myristyl -	G	L	K	S	Y	L	R	s	L	R	<b>P</b>	E	A											- NH	2
139 K094D103	Myristyl -	G	Α	Ė	N	N	P	G	R	P	P	P	T	L											- NH	2
140 K094D104	Myristyl -	G	L	R	P	E	Α	E	N	N	P	G	R	P	P	P	T	L						٠.	- NH	2
<u>Jakl</u>																										
141 K084D101	Myristyl -	G	M	E	F	L	P	S	G	s	L	K	E	Y	L	P	K	N	K	N	K	I			- NH	2
142 K084D102	Myristyl -	G	L	K	E	Y	L	P	K	N	K	N	K	I											- NH	2
Jak2	-					•																				
143 K085D102	Myristyl -	G	L	R	D	Y	L	Q	K	н	K	E	R	I											- NH	2
144 K085D105	Stearyl -	G	L	R	D	Y	L	Q	K	H	K	E													- NH	2
Jak3																							-			
145 K086D101	Myristyl -	G	M	E	Y	L	P	S	G	S	L	R	D	F	Ĺ	Q	R	Н	R	Α	L				- NH	2
146 K086D102	Myristyl -	G	M	E	Y	L	P	S	G	S	L	R	D	F	L	Q	R	Н	R	A	R	L			- NH	2
147 K086D103	Myristyl -	G	L	R	D	F	L	Q	R	H	R	Α	R	L											- NH	2
Lck																										
148 K057D001	Acetyl -	G	S	L.	v	D!	L	K	T	P	s	G	I	K	L										- NH	2
149 K057D101	Myristyl -	G	T	E	Y	M	E	N	G	s	·L	V	D	F	L	K	T	P	S	G	I	K	L		- NH	2
<u>Lyn</u>	•																									
150 K055D101	Myristyl -	G	T	E	Y	M	A	K	G	S	L	L	D	F	L	·K	S	D	E	G	G	K	V		- NH	2
MARK1																										
151 K045D101	Myristyl -	G	M	E	Y	A	S	G	G	E	V	F	D	Y	L	V	A	H	G	R	M	ĺ			- NH	2
PDGFR-b																										
152 K064D001	Acetyl -	G	D!	L	V	D!	Y	L	H	R	N	K	H	T	F	L									- NH	2
153 K064D101	Myristyl -	G	T	Ė	Y	S	R	Y	G	D	L	V	D	Y	L	Η	R	N	K	H	T	F	L		- NH	2
<b>PKCb</b>				•																						
154 K008D101	Myristyl -	G	M	Ε	Y	V	N	G	G	D	L	M	Y	H	I	Q	Q	V	G	R	F				- NH	2
155 K008D001	Acetyl -	K	K	K	K	K	K	G	G	D	L	M	Y	H	1	Q	Q	V	G	R	F			•	- NH	2
<u>Pik</u>																										
156 K035D001	Acetyl -	R	S	L	L	E!	L	H	K	R	R	K.	A												- NH	2
157 K035D101	Myristyl -	G	R	S	L	L	E!	L	Н	K	R	R	K	Α				•							- NH	2

## Figure 3D

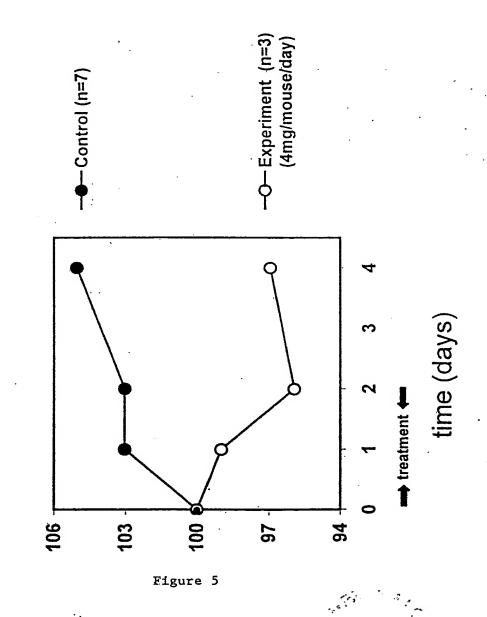
158 K035D102	Myristyl -	G	L	E	L	s	R	R	R	S	L	L	Е	L	н	K	R	R	K	A	L						- NH2
	,,.	•	_	_	_	_				_	_	_															
Ret	Myristyl -	_	3.7	-	v		v	v	G	c	7	ם	G	F	τ.	R	F	S	R	ĸ	v	G	P				- NH2
159 K080D101																		Ģ	10	1	•	•	•				
160 K080D001	Acetyl -	G	S	L	R	G	F	L	R	E!	S	R	K	V	G	P											- NH2
Ron	•										•																
161 K075D101	Myristyl -	G	L	P	Y	M	С	H	G	D	L	L	Q	F	I	R	S	P	Q	R	N	P					- NH2
<u>SNK</u>																											
162 K038D101	Myristyl -	G	L	E	Y	S	S	R	R	S	M	Α	H	I	L	K	Α	R	K	V	L						- NH2
Syk																											
163 K082D101	Myristyl -	G	M	E	M	A	E	L	G	P	L	. N	K	Y	L	Q	Q	N	R	H	V	•					- NH2
<b>TGFbRII</b>										•																	
164 K093D101	Myristyl -	G	T	A	F	H	Α	K	G	N	L	Q	E	·Y	L	T	R	H	V	I		-					- NH2
<u>TrkB</u>															•												
165 K102D101	Myristyl -	G	F	E	Y	M	K	H	G	D	L	N	K	F	L	R	. A	H	G	P	Ľ	) A	r 1	/ L	M	A	- NH2
166 K102D106	Myristyl -	G	L	R	A	Н	G	P	D	Α	V	L	M	[ <b>A</b>													- NH2
167 K102D107	Myristyl -	G	L	R	A	H	Ġ	P	D	Α	. <b>V</b>	L	•														- NH2
168 K102D108	Myristyl -	G	L	N	F	K	L	R	Α	. Н	G	P	D	Α													- NH2
169 K102D109	Myristyl -	G	F	K	L	R	A	Н	G	P	D	A	V	L													- NH2
<u>Zap70</u>																											
170 K083D101	Myristyl -	G	M	E	M	Α	G	Ģ	G	P	L	H	K	F	Ĺ	V	G	K	R	. E	E	Ι					- NH2

K:\RWAGNER\CMCC\679\FIGURES

% change in daily food consumption (g/mouse/d)



% change in body weight



# MODULATION OF TH1/TH2 DIFFERENTIATION BY A JAK-DERIVED PEPTIDE

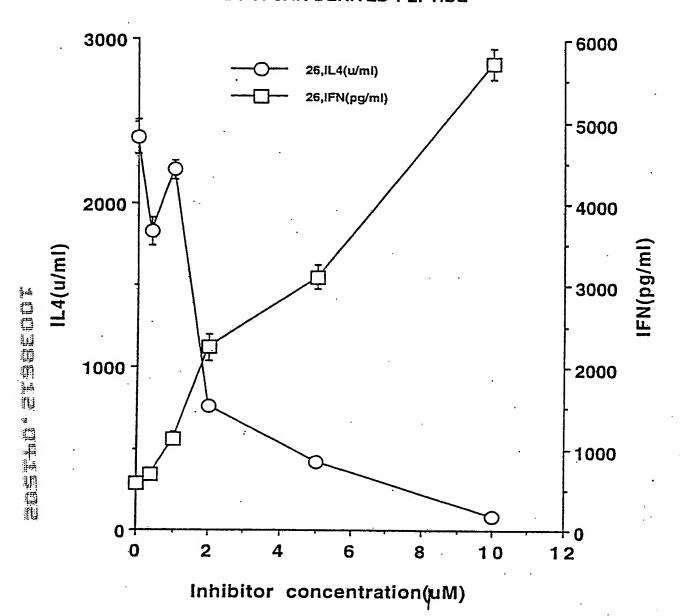


Figure 6

Fig.